

Note: Tank Appurtenances Shown for Illustrative Purposes Only. Actual Location Will Vary.

Dimensions in Inches or Feet

Not to Scale

	Date
Designed _____	_____
Drawn _____	_____
Checked _____	_____
Approved _____	_____

Fueling Facility – Two Tank

Co., Michigan
Township, T. -R. , Sec.



United States
Department of
Agriculture

Natural Resources
Conservation Service

File Name

Drawing Name
MI-052-B

Sheet of

MICHIGAN ENGINEERING STANDARD DRAWING

FILE NAME MI-052-B 5-19

STANDARD DWG. NO. MI-052-B

DATE 5-19	SHEET 1 OF 2
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1. SPILL KIT – Fueling Facility must have a spill kit located at the vehicle fueling area or stored in a building within 100 ft. of the dispensing area. The spill kit must have the minimum capacity to absorb 25 gallons as rated by the manufacturer. Additional requirements may be necessary as detailed in a SPCC. The kit must contain each of the following at a minimum:

- ☐ A suitable container for the supplies listed below (keep contents in functioning condition)
- ☐ Absorbent mat(s)
- ☐ Absorbent sock(s)
- ☐ Absorbent pillow(s)
- ☐ Loose absorbent
- ☐ Personal Protective Equipment (PPE, a minimum of chemical resistant gloves and safety goggles or glasses meeting ANSI Z87.1)
- ☐ Broom and pan or equivalent to clean up loose absorbent
- ☐ Disposal Bags

2. DISPENSING – All dispensing components must be listed by an agency such as Underwriters Laboratory (UL).

- ☐ Pumps must be tightly and permanently attached to tanks or bolted securely in place at a remote dispensing location.
- ☐ Pumps must be operated with 110/220V AC
- ☐ Nozzles must be used on hoses and must be automatic shut-off style.
- ☐ Secure all discharge and fill points with a lock.
 - ☐ An electric shutoff device on the dispensing equipment is equivalent to a lock.
- ☐ Maximum hose length is 18 feet.
- ☐ Breakaway device must be used on the fuel hose.

3. TANK APPURTENANCES

- *Spill Bucket with lock on fill port.*
- *Paint spill bucket with proper paint code according to API 1637; Gasoline-Red, On-Road Diesel-Yellow, Off-Road Diesel-Green, Kerosene-Brown.*
- *Install an audible or visual alert to indicate when the tank is at 90 percent capacity*
- *Overfill prevention (put a check mark next to the method that applies):*
 - *Provide a means to automatically stop the flow of liquid into the tank when the liquid level reaches 98 percent capacity or to restrict the flow of liquid into the tank to a maximum flow rate at 2.5 gpm when the liquid in the tank reaches 95 percent capacity.*
 - *An observer, other than the person filling the tank is present and follows a written procedure to ensure overfilling does not occur.*
- *2 Emergency Vents, one for the tank and one for the secondary containment.*
- *Fuel Level Gauge*
- *Normal Vent, required for all liquids being stored*
 - *for Class I liquids (gasoline), vent pipe must end 12' above grade*
- *Interstitial monitor with alert gauge*

QUANTITIES	
Concrete (Total)	Cu. Yds.
Sand	Cu. Yds.
# Rebar	Ln. Ft.
4" Dia. x Ft. Steel Post	Each

4. SIGNAGE (Required on each tank, the verbiage must be as shown below)

The first 2 required signs must have letters a minimum of 3" in height and a contrasting color to the tank.

- Label each tank with the name of its contents (i.e. on-road diesel, off-road diesel, gasoline).
- "FLAMMABLE – KEEP FIRE AND FLAME AWAY" (Combustible is acceptable for diesel).
- Appropriate NFPA hazard diamond (samples shown below, check with supplier for actual).

Gasoline

- Health: 1
- Fire: 3
- Reactivity: 0

Diesel

- Health: 1
- Fire: 2
- Reactivity: 0

Post warning sign(s) in the fueling area with the following or equivalent wording:

- ▢ *WARNING: It is unlawful and dangerous to dispense gasoline into unapproved containers.*
- ▢ *No Smoking*
- ▢ *Stop Motor*
- ▢ *No filling of portable containers in or on a motor vehicle. Place container on ground before filling.*
- ▢ *Discharge your static electricity before fueling by touching a metal surface away from the nozzle.*
- ▢ *Do not re-enter your vehicle while gasoline is pumping.*
- ▢ *If a fire starts, DO NOT remove nozzle – back away immediately.*
- ▢ *Do not allow individuals under licensed age to use the pump.*

5. FIRE EXTINGUISHER – Equip each motor vehicle fueling area with one or more listed fire extinguishers that have a minimum capability of 40-B.C. If the fire extinguisher is placed in a building, a sign that is visible from the fueling area must be placed on the building indicating a fire extinguisher is inside.

- Extinguishers with the capability of 40-B:C must be located within 30 feet.
- Extinguishers with the capacity of 80-B:C must be located within 100 feet.

6. CONCRETE – NRCS must inspect the subgrade, forms and steel reinforcement prior to placement of concrete.

- For vehicle loads $\leq 40,000$ lbs., use 6 inch thick concrete and #4 rebar @ 18 inch max. spacing with 16 inch splice overlap.
- For vehicle loads $> 40,000$ lbs., use 8 inch thick concrete and #5 rebar @ 18 inch max. spacing with 20 inch splice overlap.

7. EXISTING TANK

- Existing tank is no longer being used to store petroleum products on the farm.

8. ELECTRICAL

- *Install a clearly identified emergency electrical disconnect between 20 and 100 feet from the dispensing location in accordance with NFPA 30A.*

I certify that the electrical wiring and electrical utilization equipment is of a type specified by and installed in accordance with NFPA 70, National Electrical Code, and that the electrical wiring and utilization equipment are approved for the locations in which they are installed.


Licensed Electrician

License Number

Date _____

Not to Scale

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DATE 5-19	SHEET 2	OF 2

 United States Department of Agriculture Natural Resources Conservation Service	Fueling Facility — Two Tank		Date _____
	Co., Michigan Township, T. _____, Sec. _____		Designed _____ Drawn _____ Checked _____ Approved _____
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Sheet _____ of _____			